

# UNITED STATES PATENT AND TRADEMARK OFFICE

NT OF COMMERCE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria. Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,960	11/13/2003	Bryan J. Gilbert	6270/131 942	
757 7	590 07/19/2004		EXAMINER	
BRINKS HO	FER GILSON & LIONE	RAYMONO, EDWARD		
P.O. BOX 1039 CHICAGO, IL			ART UNIT	PAPER NUMBER
011101100, 12	. 50010		2857	

DATE MAILED: 07/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

i							
		Applicat	ion No.	Applicant(s)			
Office Action Summary		10/712,9	60	FORTH ET AL.			
		Examine	r	Art Unit			
		Edward	Raymond	2857			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SH THE - Exte after - If the - If NC - Faill Any	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNI INSIGN SOLEN THE PROVISIONS SIX (6) MONTHS from the mailing date of this common period for reply specified above its less than thirty (3) period for reply is specified above, the maximum stature to reply within the set or extended period for reply reply received by the Office later than three months are departed term adjustment. See 37 CFR 1.704(b).	CATION. of 37 CFR 1.136(a). In no evaluation. O) days, a reply within the statutory period will apply and will, by statute, cause the apply.	vent, however, may a reply be tim tutory minimum of thirty (30) days vill expire SIX (6) MONTHS from plication to become ABANDONE	nely filed s will be considered timel the mailing date of this c O (35 U.S.C. § 133).	y. ommunication.		
Status							
1) 又	Responsive to communication(s) file	ed on 03 May 2004.					
2a)□	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
3)□							
·	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5) 6) 7) 8)	4) ☐ Claim(s) 1-55 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) is/are rejected.						
10)⊠	The specification is objected to by the The drawing(s) filed on <u>13 November</u> . Applicant may not request that any object Replacement drawing sheet(s) including The oath or declaration is objected to	$\frac{r}{2003}$ is/are: a) $\boxtimes$ action to the drawing(s) the correction is requi	be held in abeyance. See red if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 C	FR 1.121(d).		
Priority	under 35 U.S.C. § 119						
а)	Acknowledgment is made of a claim  All b) Some * c) None of:  1. Certified copies of the priority  2. Certified copies of the priority  3. Copies of the certified copies application from the Internation  See the attached detailed Office action	documents have be documents have be of the priority docum nal Bureau (PCT Ru	en received. en received in Applicati ents have been receive lle 17.2(a)).	on No ed in this National	Stage		
Attachmer			4) Interview Summer	(PTO-413)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)			4) Interview Summary (PTO-413) Paper No(s)/Mail Date				
	mation Disclosure Statement(s) (PTO-1449 or er No(s)/Mail Date <u>20040224, 20040227</u> .	PTO/SB/08)	5)	atent Application (PT	O-152)		

Application/Control Number: 10/712,960 Page 2

Art Unit: 2857

# **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 1-45 and 50-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "converting said calculations upon said digitally sampled voltage and current into one network protocol; and means for interfacing with an external network" is unclear. There is no link between what the sampled data is used for and how the means for interfacing with an external network is accomplished. There is no claim language that points out how and where the data is interfaced with an external network.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Bearden et al. Bearden et al. teaches an electric power meter, comprising: means for digitally sampling voltage and current (Claims 1, 2, 6, 10, 11, 15, 19, 24, and 50-53: see col. 5, lines 6-25); means for storing said digitally sampled voltage and current (Claims

Art Unit: 2857

1, 2, 6, 10, 11, 15, 19, 24, and 50-53: see col. 9, lines 21-27); means for performing power calculations upon said digitally sampled voltage and current (Claims 1, 2, 6, 10, 11, 15, 19, 24, and 50-53: see col. 12, lines 38-40), and converting said calculations and said digitally sampled voltage and current into at least one network protocol (Claims 1, 2, 6, 10, 11, 15, 19, 24, and 50-53: see col. 7, lines 60-64); and means for interfacing with an external network (Claims 1, 2, 6, 10, 11, 15, 19, 24, and 50-53: see col. 7, line 60 through col. 8, line 8); wherein said network protocol is one of e-mail, File Transfer Protocol (FTP), Hypertext Transfer Protocol (HTTP), Dynamic Host Configuration Protocol (DHCP), Hypertext Markup Language (HTML), or Extensible Markup Language (XML) (Claims 1, 2, 6, 10, 11, 15, 19, 20, 24, and 50-53: see col. 7, line 60 through col. 8, lines 8: The Examiner notes that computers on a LAN must communicate in one of the many standard protocols, including e-mail, FTP, SOAP, Mime, HTTP, HTTPS, DHCP, PPP, HTML, SMTP, and XML, which is inherently taught by the reference).

Bearden et al. teach an electric power meter further comprising: means for connecting an external device to said electric power meter (Claims 3, 7, 12, 16, 21, and 25: see Figure 1A), wherein said external device transmits packet data to said electric power meter to be processed by the processor and provided through said interfacing means (Claims 3, 7, 12, 16, 21, and 25: Figure 1A).

Bearden et al. teach an electric power meter wherein said interfacing means further comprises means for interfacing with multiple users simultaneously (Claims 4, 8, 13, 17, 22, 26, 54, and 55: see Figure 1B: The Examiner notes that the Secondary Distribution allows for simultaneous use of the system).

Bearden et al. teach an electric power meter wherein said interfacing means supports Ethernet communications (Claims 5, 9, 14, 18, 23, and 27: see col. 7, lines 60-64: The Examiner notes that LAN communication supports Ethernet communications).

Bearden et al. teach an electric power meter wherein a web server provides data to the network interface in Hypertext Markup Language (HTML) or Extensible Markup Language (XML) format (Claim 20: see col. 8, lines 1-8).

Bearden et al. teach a system for modifying the functionality of the electric power meter previously installed in the field and operating, the system comprising: a server computer (Claim 28: see col. 7, lines 4-9), the electric power meter in communication with the server computer over a network (Claim 28: see col. 7, lines 60-64), the electric power meter operated with a software configuration stored therein (Claim 28: see Figure 3: Tools and C&I PC); and a storage device in communication with the server computer, the storage device comprising a database (Claim 28: see col. 9, lines 21-27 and also Figure 3: Tools), wherein a copy of the software configuration is stored in the database, the server is operable to modify the operation of the electric power meter as a function of modifications to the database (Claim 28: see Figure 8A: Adjust Feature 93).

Bearden et al. teach a system wherein the server computer comprises a network server operatively communicating with a master server (Claim 29: see Figure 2A: Central Station 61), the network server operable to generate display pages to create a virtual meter site (Claim 29: see Figure 3: Remote Data Display 81 and 85) and the master server operable to maintain the database (Claim 29: see Figure 2A: Central Station).

Application/Control Number: 10/712,960

Art Unit: 2857

Bearden et al. teach a system wherein the server computer comprises an intelligent electronic device operatively communicating over the network (Claim 30: see Figure 8A: Energy Management Controller 90).

Bearden et al. teach a system further comprising a browser coupled to the server computer, the browser operable to access the database (Claim 31: see col.6, lines 54-57: The Examiner notes that a browser is inherently used to communicate to the Central Station).

Bearden et al. teach a system wherein the software configuration comprises firmware and frameworks (Claim 32: see col. 9, lines 21-27 and also col. 8, lines 1-4: The Examiner notes that the storage device is equivalent to firmware).

Bearden et al. teach a system wherein the server is operable to perform modifications to the firmware and frameworks as a function of selections lists selectable by a user (Claim 33: see Figure 8A: Adjust Feature 93: The notes that the device is equipped to remotely adjust the device).

Bearden et al. teach a system wherein said electric power meter is operative to contact a second server to authorize payment for said modifications (Claim 34: see col. 12, lines 38-41).

Bearden et al. teach a system wherein the network comprises an Intranet (Claim 35: see col. 7, lines 60-64).

Bearden et al. teach a system wherein the network comprises an Internet

Protocol based network (Claim 36: see col. 7, lines 49-64: The Examiner notes that a

LAN is configured to communicate within an Intranet and the Internet).

Bearden et al. teach a system wherein the electric power meter comprises a watt-hour meter (Claim 37: see col. 13, lines 2-19).

Bearden et al. teach a system wherein the software configuration is stored in said memory and said memory comprises volatile memory and nonvolatile memory (Claim 38: see col. 9, lines 21-27), wherein a first portion of the software configuration is stored in the non-volatile memory and a second portion of the software configuration is stored in the volatile memory (Claim 38: see col. 8, lines 2-19).

Bearden et al. teach a system wherein the second portion of the software configuration is transferable over the network from the database to the electric power meter as a function of instructions within the first portion of the software configuration (Claim 39: see col. 9, lines 21-34).

Bearden et al. teach a system wherein the server is operable to modify the operation of the electric power meter with an update transferable over the network to the electric power meter (Claim 40: see Figure 8A: Adjust Feature 93: The Examiner notes that the capacity to communicate and store information on the remote device inherently teaches the ability to update information via the network).

Bearden et al. teach a system wherein the update comprises a modified software configuration (Claim 41: see col. 12, lines 18-27).

Bearden et al. teach a system wherein the update comprises a modification to the software configuration (Claim 42: see col. 12, lines 18-27).

Bearden et al. teach a system wherein the update comprises an enabling mechanism (Claim 43: see col. 12, lines 38-41).

Application/Control Number: 10/712,960 Page 7

Art Unit: 2857

Bearden et al. teach a system wherein the update comprises an email message (Claim 44: see Figure 2A: Online Data 63).

Bearden et al. teach a system wherein the update comprises a datafile (Claim 45: see Figure 2A: On-Line Data 63).

Bearden et al. teach an IED comprising: an analog to digital converter operative to sense analog signals indicative of voltage and current in at least one conductor of a power system and produce digital signals indicative of said analog signals (Claims 46 and 48: see Figure 5A: Sample and Digitize Units 101 and 111); a CPU coupled with said analog to digital converter and operative to process said digital signals to produce electrical parameters (Claims 46 and 48: see col. 8, lines 1-8); a memory coupled to said CPU and operative to store said electrical parameters (Claims 46 and 48: see col. 9, lines 21-27); a communications circuit coupled to said CPU and coupleable to a network (Claims 46 and 48: see col. 7, lines 49-60); wherein said CPU is operative to transfer said electrical parameters through said communications circuit to said network using at least one of Hypertext Markup Language (HTMQ and Extensible Markup Language (XML) format and/or FTP, SOAP, Mime, HTTP, HTTPS, PPP, or SMTP protocols (Claims 46 and 48: see col. 7, lines 60-64).

Bearden et al. teach an IED wherein said IED comprises an electronic power meter (Claims 47: see col. 5, lines 53-57).

Bearden et al. teach an IED wherein said IED comprises an electronic power meter (Claim 49: see col. 5, lines 53-57).

#### Contact Information

Application/Control Number: 10/712,960 Page 8

Art Unit: 2857

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Raymond whose telephone number is 571-272-2221. The examiner can normally be reached on Monday through alternating Friday between 8:00 AM and 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-2221 for regular communications and 571-272-1562 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

July 14, 2004

Edward Raymond Patent Examiner Art Unit 2857